

3+Path Migration Instructions

**A member of the 3+ family of products.
For use with DOS 3.1 or higher**

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Manual Part No. 1721-01
Published November, 1986.
Originally Published January, 1986.
Printed in the U.S.A.

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Table of Contents

3+ Path Migration Instructions

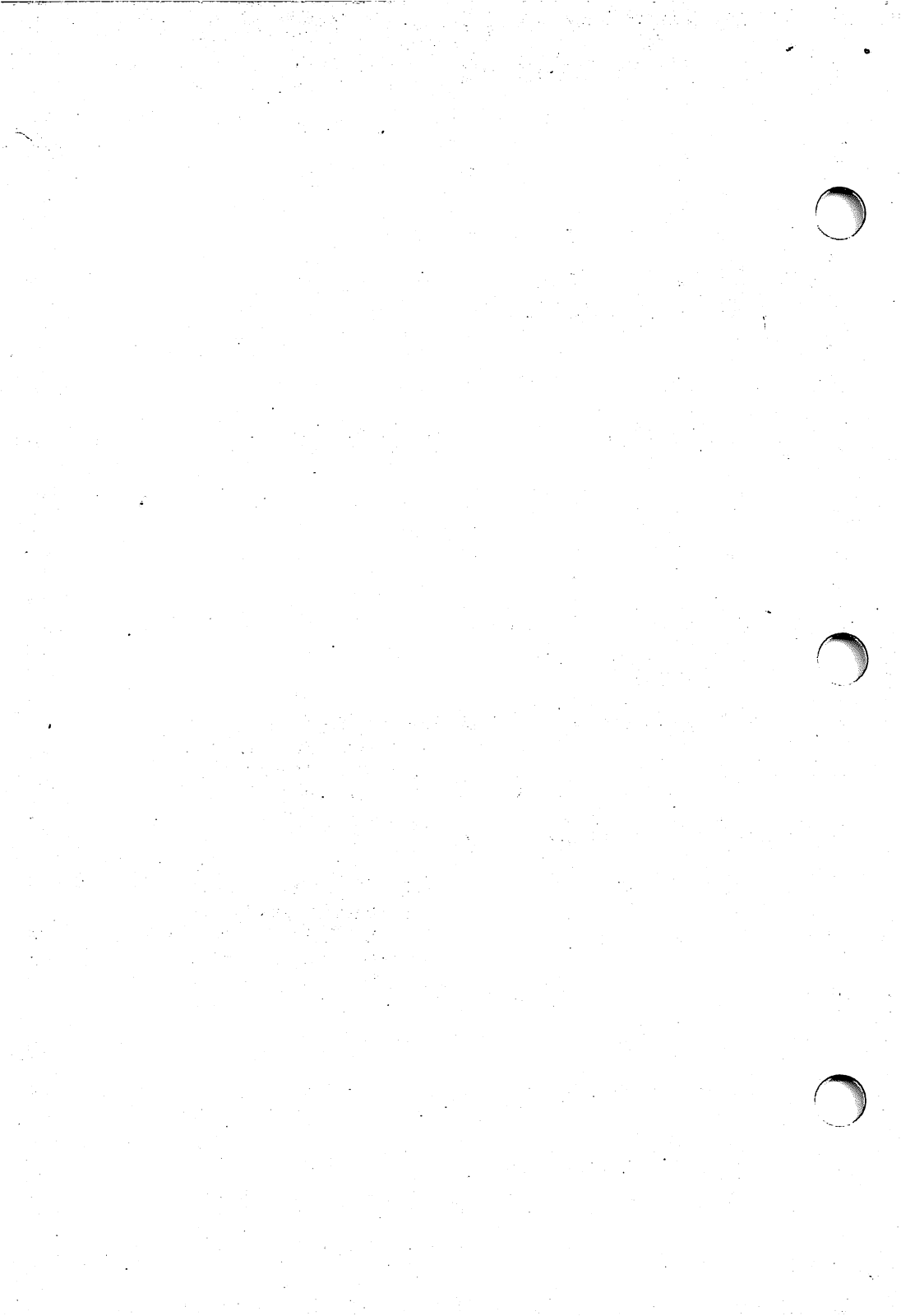
1-1 Requirements

1-2 Differences Between EtherSeries and 3+

- 1-3 Volumes versus Directories
- 1-4 How Things are Named
- 1-5 Multiuser Applications

1-5 Converting EtherSeries to 3+

- 1-6 Save Volumes
- 1-11 Format Server Disk
- 1-11 Install 3+ Services
- 1-11 Set Up Network Services
- 1-11 Copy Stored Files



3+Path Migration Instructions

These instructions provide information that you need when you convert, or **migrate**, from an EtherSeries network to a 3+ network.

Requirements

The following requirements must be met in preparation for upgrading from an EtherSeries network to a 3+ network:

- ▶ Servers that will have 3+ services installed must be running DOS 3.1 or higher. Hard disks must be formatted with DOS 3.1 or higher.
- ▶ Users who will be communicating with the 3+ network must have DOS 3.1 or higher installed on their personal computers.
- ▶ Users who will be communicating with both EtherShare and 3+ servers must have both EtherShare user software and 3+ user software installed on their personal computers, or have it available on shared volumes and directories on the network.

- ▶ Users who will be communicating with both EtherShare and 3+ servers must have EPATH software installed on their personal computers.
- ▶ 3+Mail must be installed on a server to use electronic mail with 3+ servers. Because EtherMail and 3+Mail are not compatible, 3Com recommends that either EtherMail or 3+Mail be installed, but not both.

Differences Between EtherSeries and 3+

Before you change some or all of your network from a 2.2 or 2.4 version of the EtherSeries software to the 3+ software, you should understand the differences between the two:

- ▶ Volumes versus directories
- ▶ How things are named: the Name service
- ▶ How multi-user applications share files

Each topic is discussed below. For an overview of the 3+ server software, see Chapter 2, in the *3+ Administrator's Guide*. For a complete description of the new commands and syntax, see Chapter 6 of the *3+ Administrator's Guide*, and Part II of the *3+Share User's Guide*.

Volumes versus Directories

EtherShare and the 3+Share File service do not share storage space and files in the same way: EtherShare shares volumes and the File service shares directories. In addition, a directory is not quite a one-for-one replacement for a volume.

A directory managed by the File service is a DOS directory and a part of the hierarchical file structure of the disk where it resides. A directory does not have a password or an access type as do volumes in EtherShare. In the File service, sharenames give passwords and access rights to directories. Thus, the closest approximation to an EtherShare volume in the File service is a directory and one of its sharenames.

A volume is a fixed amount of storage space; a directory is not. A directory uses storage space as required by its contents and allowed by the size of the drive on which it resides. Storage space for directories is not allocated or limited in advance, but is dynamically taken from and returned to a disk-wide pool of free space.

Although volumes do not equal directories, you may find it useful to equate the two if you are migrating from an existing EtherSeries based network to a 3+ based network. An EtherSeries network user has a collection of volumes; a 3+ network user has a hierarchy of directories starting at his home directory. You can exchange the contents of volumes with the contents of directories on a one-for-one basis.

How Things are Named

The naming scheme is different between EtherSeries and 3+ software. In EtherSeries software, only users and volumes are named, and users have a one-part name up to eight characters long. In 3+ software, users, groups (distribution lists), and servers are named with three-part names. In EtherSeries software, each network server keeps track of its own users. In 3+ software, the Name service keeps track of names, including user names.

All user, server, and group names in the 3+ Name service are composed of three standard parts: name, domain, and organization. This three-part naming scheme allows you to organize names into a three-level hierarchy. Typically, this means organizing names into domains and domains into organizations. Additionally, the 3+ rules for forming names allow user names to resemble people's given names. See Chapter 4 of the *3+ Administrator's Guide* for the rules on forming three-part names.

Many functions that were a part of EtherShare are now a function of the Name service. This includes creating and deleting users and listing the names and status of users and servers.

You can readily move user names from EtherSeries to 3+Name service names. It is recommended that you take advantage of the increased flexibility in the naming scheme and use people's full first and last names for their user names in the Name service. If users want to use their old EtherSeries user names, you can create aliases for them that equate their old EtherSeries user names with their new 3+Name service user names.

By converting volumes to directories and using aliases to retain old user names, you can readily migrate from an EtherSeries network to a 3+ (or mixed EtherSeries and 3+) network while retaining the ease of use and familiar names of your old EtherSeries network.

Multiuser Applications

EtherSeries and 3+ networks use different locking mechanisms for controlling concurrent access to data files. EtherSeries uses its own mechanism of semaphores, and 3+ uses the mechanism built into DOS 3.1. If you have a mixed network, you must use multiuser applications on the network for which they were written. If you are converting your entire network to a 3+ network, you must upgrade the multi-user applications to versions that use the DOS 3.1 byte locking scheme and therefore are compatible with ones written for the IBM PC network.

Converting EtherSeries to 3+

You can change part of your EtherSeries network to 3+ software, or you can migrate your entire network to a 3+ network. You will need to convert any multiuser applications, and migrate data or user files that will be used on a 3+ network. If you have certain applications that will not be compatible with 3+ software (multiuser applications that use semaphores for example), you may want to keep those applications under the EtherSeries network. You may, however, want to take advantage of 3+'s ability to communicate between networks and install the 3+Mail and 3+Route products on your network.

Whether converting some or all of your network, you will need to perform the following steps.

1. Save the contents of EtherSeries volumes for servers that will be migrated to 3+.
2. Format server disks and install DOS 3.1 or higher.
3. Install 3+ software. Refer to Chapters 3 and 4 of the *3+ Installation and Configuration Guide*.
4. Set up 3+ services. Refer to Chapter 4 of the *3+ Administrator's Guide*.
5. Copy the stored volumes to 3+ directories.

Step 1: Save Volumes

You must save the contents of all volumes from an EtherSeries server that you want to keep before you install 3+ software. You can take responsibility for copying both public volumes (such as applications) and user volumes, or you can copy just public volumes and have each user back up and save his own files.

You can save files in the following ways:

- ▶ Copy files to a temporary volume on another EtherSeries server
- ▶ Copy files to a hard disk on a workstation
- ▶ Copy files to diskettes

If you already have an operational 3+ server, you can copy files from an EtherSeries server to the 3+ server. In this case, be sure to link the EtherSeries volume and the 3+ directory to different drive identifiers.

You can copy the files using the DOS COPY command or the 3COPY program on the *3+Share User #1* diskette. The 3COPY program lets you copy all directories and subdirectories below the directory you specify. Each of the following examples uses the 3COPY program to copy volumes from an EtherSeries server. For information on 3COPY, refer to Appendix E of the *3+ Administrator's Guide*. For information about the DOS COPY and the XCOPY commands, see the DOS manual. (XCOPY only exists on DOS 3.2 diskettes.)

Copying Files to an EtherSeries Volume

You can copy files to a temporary volume on another EtherSeries server if you have a multiple server network. To do this, follow the steps below.

1. Log in to the server that will have the temporary volume.

ES LOGIN SERVER2 ↵

2. Create a user for each user whose volumes you are saving. Give the user a slightly different name from his regular user name. For example, add a "T" (for temporary) to the user name.

ES UCREATE RANDYST ↵

3. Log in as the user and create a volume for that user with a password. Do this for each user you created. For convenience, give each volume the same password.

ES LOGIN RANDYST ↵

ES CREATE TEMP1 SECRET ↵

4. Log in as the original user.

ES LOGIN RANDYS ↵

5. Link the original volume to a drive identifier, and link the temporary volume to a drive identifier.

ES LINK E: VOL1 ↵

ES LINK F: TEMP1 ↵

Password? SECRET ↵

1 3+Path Migration Instructions

1-8

6. Use 3COPY to copy the contents of the original volume to the temporary volume.

```
3COPY E:*. * F: /S/E ↵
```



NOTE: The E option copies empty directories.

Repeat Steps 5 and 6 for each volume that needs to be copied.

7. Log out when you have copied all the volumes that you want to use on the 3+ network.

```
ES LOGOUT ↵
```

Copying to a Workstation Hard Disk

To copy volumes from a EtherSeries server to a workstation with a hard disk, follow the steps below.

1. Log in at the workstation as the user whose volumes you are copying.

```
ES LOGIN RANDYS ↵
```

2. Use the DOS MKDIR (Make Directory) command to create a directory for each volume you are copying. For convenience, give the directory the same name as the volume.

```
C: ↵
```

```
MKDIR C:MYVOL1 ↵
```

3. Change to the subdirectory.

```
CD MYVOL1 ↵
```

4. Link to the volume you want to copy.

```
ES LINK E: MYVOL ↵
```

5. Use 3COPY to copy the contents of each volume to the corresponding directory on the hard disk.

```
3COPY E:*. * C: /S ↵
```

Repeat Steps 1- 4 for each user.

6. Log out when you have copied all the volumes from the server.

```
ES LOGOUT ↵
```

Copying to Diskettes

You can copy the volumes you want to save to diskettes. If a volume is larger than a single diskette, 3COPY will prompt you to insert another diskette.

The following example copies a volume to a diskette with the 3COPY program.

1. Log in as the user.

```
ES LOGIN BOBD ↵
```

2. Link to the volume.

```
ES LINK E: MYVOL ↵
```

3. Insert a blank, formatted diskette in drive A:.

4. Copy the contents of MYVOL to the diskette. If more than one diskette is required, label each one.

```
3COPY E:*. * A: /S/E ↵
```

Repeat Steps 2-4 once for each volume you want to copy.

5. When you have copied all the volumes you want to save, log out.

```
ES LOGOUT ↵
```

When you have copied all the volumes that you want to use on the 3+ network, you are ready to install the 3+ server software.

Step 2: Format Server Disk

PC Servers: Format the server disk and install DOS 3.1 or higher for PC servers. Boot the computer from DOS.

3Servers: Follow the instructions in your 3Server guide to reformat the disk and establish the 3Console connection.

Step 3: Install 3+ Services

To install 3+ software, refer to the *3+ Installation and Configuration Guide*. Chapter 3 explains how to install the 3+ system software.

Chapter 4 explains how to install the 3+ services. Since you are migrating from EtherSeries to 3+ software, you will use the **Migrate** option of the Install or Deinstall Individual Services menu to install 3+ services.



CAUTION: If you are migrating from EtherSeries to 3+ software, you will *not* be able to deinstall the 3+ services after the migration process is complete; i.e., the 3+ software cannot be moved to a different server if you install with the **Migrate** option.

Step 4: Set Up Network Services

After installing, set up the services following instructions in Chapter 4 of the *3+ Administrator's Guide*.

Step 5: Copy Stored Files

When you add a user to the Name service, 3+ software creates a home directory for that user. The user's home directory is where you will copy those files you have saved to an EtherSeries volume, hard disk, or diskette. Follow the appropriate example below to copy user files to home directories.

Copying Files Saved to a Temporary Volume

If you have copied EtherSeries user volumes to a temporary volume on another EtherSeries server or to a workstation's hard disk, you must create a user diskette containing EPATH software. This lets users communicate with both the EtherSeries server and the 3+ server that has the user's home directory. If this is the case, refer to Chapter 2 of the *3+ Installation and Configuration Guide* for instructions on creating a "3+Local Workstation Startup disk with EPATH".

1. Insert the 3+ Local Workstation with EPATH diskette that you created earlier into drive A: and start or restart the computer.
2. Log in to the 3+ network as the user whose files you want to copy.

LOGIN RANDY SHANE ↵

3. Log in to the EtherSeries server as you normally do.
4. Link to the temporary volume on the EtherSeries server.

ES LINK F: TEMP1 ↵

Password? SECRET ↵

5. Link to the user's home directory.

3F LINK E: ↵

6. Create the directory to hold the contents of the volume. You can, of course, copy the files into the root directory of the user's home directory.

```
MKDIR E:MYDIR ↵
```

7. Use 3COPY to copy the contents of the volume to the directory you created in Step 6.

```
3COPY F:*. * E:\MYDIR /S/E ↵
```

8. Repeat Steps 4 - 7 for each volume you want to move. When you have copied each user's files to his home directory, log out.

```
LOGOUT ↵
```

Copying Files Saved to a Hard Disk

To copy files saved to a subdirectory on a hard disk to the user's home directory, follow the steps below.

1. Log in as the user from the workstation with the hard disk.

```
LOGIN Randy Shane ↵
```

2. Link to the user's home directory.

```
3F LINK E: ↵
```

3. Create the directory to hold the contents of the volume. You can, of course, copy the files into the root directory of the user's home directory.

```
MKDIR E:MYDIR ↵
```

1 3+Path Migration Instructions

1-14

4. Use 3COPY to copy the contents of the hard disk's subdirectory to the directory MYDIR.

```
3COPY C:\MYVOL1\*.* E:\MYDIR /S ↵
```

Repeat Steps 3 and 4 for each subdirectory you need to copy.
Repeat Steps 1 - 4 for each user.

5. When you have copied each user's files to his home directory, log out.

```
LOGOUT ↵
```

Copying Files Saved to Diskette

To copy files stored on a diskette or diskettes to the user's home directory, follow the steps below.

1. Log in as the user.

```
LOGIN Bob Doe ↵
```

2. Link to the user's home directory.

```
3F LINK E: ↵
```

3. Create the directory to hold the contents of the volume. You can, of course, copy the files into the root directory of the user's home directory.

```
MKDIR E:MYDIR ↵
```

4. Insert the diskette to which you copied the user's files in drive A:. If the files are on more than one diskette, insert them in order.

5. Use 3COPY to copy the contents of the diskette to the directory.

3COPY A:*. * E:\MYDIR /S ↵

6. Repeat Steps 3 - 5 for each volume you are copying for this user.

Repeat Steps 1 - 6 for each user.

7. When you have copied each user's files to his home directory, log out.

LOGOUT ↵

When you have completed these steps, you will be able to access both EtherShare servers and 3+ servers from a workstation with disk drives as well as from one without disk drives. For instructions on creating workstation startup disks, refer to Chapter 2 of the *3+ Installation and Configuration Guide*. For instructions on creating 3+Start volumes for diskless workstation startup, refer to Chapter 4 of the *3+ Administrator's Guide*.

